SURFACE TRANSPORTATION BOARD

DECISION

Docket No. NOR 42125

E.I. DUPONT DE NEMOURS AND COMPANY v. NORFOLK SOUTHERN RAILWAY COMPANY

<u>Digest</u>: ¹ The Board makes technical corrections to its decision (<u>Merits Decision</u>) finding that certain rates charged by Norfolk Southern Railway Company for shipments by E.I. du Pont de Nemours and Company had not been shown to be unreasonable. The Board also adds a public version of the market dominance appendix to the <u>Merits Decision</u>, makes several grammatical and formatting changes to the <u>Merits Decision</u>, and establishes a deadline for the filing of petitions for reconsideration.

Decided: October 1, 2014

On March 24, 2014, the Board served the final merits decision (Merits Decision) in this proceeding finding that certain rates charged by Norfolk Southern Railway Company (NS) for shipments by E.I. du Pont de Nemours and Company (DuPont) had not been shown to be unreasonable. On March 31, 2014, DuPont filed a motion, which NS supported, (1) stating that it had identified a number of technical errors in the Merits Decision and (2) requesting that the Board extend the deadline for filing petitions for reconsideration until 20 days after the Board issues a decision addressing the technical errors. The Board tolled the deadline for seeking reconsideration; confirmed that it would issue a decision correcting technical errors, with petitions for reconsideration due 20 days thereafter; and granted DuPont's contested motion seeking an extension for the page limit on petitions for reconsideration (and replies thereto) to 50 pages.²

¹ The digest constitutes no part of the decision of the Board but has been prepared for the convenience of the reader. It may not be cited to or relied upon as precedent. <u>Policy Statement on Plain Language Digests in Decisions</u>, EP 696 (STB served Sept. 2, 2010).

² See E.I. DuPont de Nemours & Co. v. Norfolk S. Ry., NOR 42125, slip op. at 1 (STB served Apr. 11, 2014); E.I. DuPont de Nemours & Co. v. Norfolk S. Ry., NOR 42125, slip op. at 1 (STB served Apr. 30, 2014); E.I. DuPont de Nemours & Co. v. Norfolk S. Ry., NOR 42125, slip op. at 1 (STB served June 11, 2014).

DuPont and NS submitted a joint petition on April 14, 2014, identifying 31 technical errors. The parties agree on the appropriate correction for 28 of these, but disagree about the proper method for correcting the remaining three.

TECHNICAL MATTERS RAISED BY THE PARTIES

- 1. <u>Operating Expense Volume Index</u>. The parties agree that the car-miles index used to project operating expenses throughout the discounted cash flow (DCF) model is calibrated incorrectly for the 2009-2010 adjustment, resulting in an understatement of operating expenses for 2010 and all subsequent years. This error is corrected.
- 2. <u>Allocation of Contingency and Mobilization</u>. The parties agree that the DCF model did not allocate mobilization and contingency costs between real estate acquisition costs and all other road property accounts. This error is corrected.
- 3. <u>Investment Contingency Costs</u>. The parties agree that the DCF model used a figure for road property investment contingency that omitted a contingency factor for engineering investment. This error is corrected.
- 4. <u>Bonus Depreciation</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting DuPont's position on bonus depreciation, the associated workpapers did not implement this position, resulting in an understatement of bonus depreciation and an overstatement of capital carrying charges. This error is corrected.
- 5. <u>Miles Used to Develop State Income Tax Rates</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting NS's proposed route miles, the corresponding adjustment to operating miles—used to develop a weighted average state income tax rate—was not made in the associated workpapers. This error is corrected.
- 6. <u>Real Estate Acquisition Costs</u>. The parties agree that the calculation of land investment values did not include the real estate acquisition costs adopted by the Board in the text of the Merits Decision. This error is corrected.
- 7. <u>Number of Locomotives</u>. The parties agree that, given the fact that the text of the <u>Merits Decision</u> stated that the Board was adopting the locomotive "peaking factor" proposed by DuPont (and adjustments to that factor to account for warm-up and cool-down periods), both the number of GP38 locomotives and the number of ES44AC locomotives should be reduced in the associated workpapers. This error is corrected.
- 8. <u>Peaking Factor</u>. The parties agree that the calculation of railcar requirements did not properly account for the "peaking factor" proposed by DuPont and adopted by the Board in the text of the <u>Merits Decision</u>. This error is corrected.
- 9. <u>Start-up and Training</u>. The parties agree that the calculation of start-up and training expenses should be reduced to reflect the downward revisions made by the Board in the text of the <u>Merits</u>

<u>Decision</u> to the maintenance-of-way (MOW) staff numbers proposed by NS. This error is corrected.

- 10. <u>Fringe Benefit Ratio on MOW Salaries</u>. The parties agree that the salaries for certain MOW employees did not properly account for the fringe benefit ratio proposed by NS and adopted by the Board in the text of the <u>Merits Decision</u>. This error is corrected.
- 11. <u>Bridge Inspector Wages</u>. The parties agree that the total for bridge inspector wages was calculated using an incorrect bridge inspector salary number. This error is corrected.
- 12. <u>Fuel Facilities Investment</u>. The parties agree that the total for fuel facilities investment failed to include fueling facility costs for 12 large yards, and also incorrectly calculated costs for direct-to-locomotive fueling facilities. These errors are corrected.
- 13. <u>Stripping Costs in Roadbed Preparation</u>. The parties agree that roadbed preparation costs mistakenly included costs related to stripping, which were proposed by NS but rejected by the Board in the text of the Merits Decision. This error is corrected.
- 14. <u>Earthwork Unit Costs</u>. The parties agree that various earthwork unit costs were calculated incorrectly because they included costs proposed by NS but rejected by the Board in the text of the <u>Merits Decision</u>. This error is corrected.
- 15. <u>Yard Drainage Investment</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting DuPont's proposed yard drainage costs for six major yards and NS's proposed yard drainage costs for certain other yards, no yard drainage costs were included in the associated workpapers. This error is corrected.
- 16. <u>Land for Waste Quantities</u>. The parties agree that average land cost for waste material was understated because the calculation did not include the full costs for the "agricultural land" subcomponent. This error is corrected.
- 17. <u>Undercutting Investment</u>. The parties agree that while the text of the <u>Merits Decision</u> rejected proposed investment for undercutting, the earthwork quantity summary formulas in the associated workpapers were not adjusted to exclude undercutting quantities. This error is corrected.
- 18. <u>Culvert Investment</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting NS's proposed culvert costs, no such costs were included in the road property investment calculation. This error is corrected.
- 19. <u>Retaining Wall Investment</u>. The parties agree that the cost of retaining walls was calculated incorrectly because gabion unit cost was not multiplied by gabion quantity. This error is corrected.
- 20. <u>Mobile Bridge Investment</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was accepting the movable bridge unit costs proposed by DuPont and the

parties' agreement on movable bridge inventory, the associated workpapers included not only two bridges excluded by the parties, but also included the movable span costs proposed by DuPont as well as the movable span costs proposed by NS. These errors are corrected.

- 21. <u>MOW Building Costs</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting NS's proposed MOW building costs, DuPont's proposed costs for MOW yard buildings were used in the associated workpapers. This error is corrected.
- 22. <u>Guard Booth Investment Costs</u>. The parties agree that auto yard guard booth costs were double-counted. This error is corrected.
- 23. <u>Intermodal Yard Paving Costs</u>. The parties agree that paving costs for medium-sized intermodal yards were adjusted incorrectly. This error is corrected.
- 24. <u>Slide Fence Investment Costs</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting the slide fence costs advocated by DuPont on rebuttal, NS's proposed slide fence costs were used in the associated workpapers. This error is corrected.
- 25. <u>Yard Light and Paving Investment</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting yard unit costs and quantities proposed by DuPont on rebuttal, no lighting costs for small, medium, and large flat yards were included in the associated workpapers. The parties further agree that total paving costs for small flat, medium flat, large flat, and hump yards were calculated incorrectly. These errors are corrected.
- 26. <u>Loose and Solid Rock Quantities in Roadbed Preparation</u>. The parties agree that while certain common earthwork quantities were excluded from roadbed preparation figures, corresponding loose rock and solid rock quantities were not excluded. This error is corrected.
- 27. <u>Ballast Unit Costs</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was adopting the ballast costs proposed by DuPont on rebuttal, the ballast costs proposed by DuPont on opening were used in the associated workpapers. This error is corrected.
- 28. <u>Traffic and Revenue—Shifting Tonnage from Capped Plants</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was accepting DuPont's proposal to reallocate coal shipment volumes from coal-fired power plants that would exceed the 85% capacity limit to other plants below that limit, the traffic and revenue figures in the associated workpapers were not adjusted accordingly. This error is corrected.
- 29. <u>Terminal Value Calculation</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board was accepting DuPont's proposal to adjust the DCF's terminal value, the calculations in the associated workpapers were not adjusted accordingly. The parties disagree on the appropriate method for correcting this error. NS argues that the terminal value calculation should be adjusted to make the tax shielding effect of interest payments consistent with the railroad's capital structure into perpetuity, starting <u>after</u> the 20-year debt amortization period. In contrast, DuPont proposes to use the average interest payment over the 20-year debt amortization period in the perpetuity calculation. Because NS's proposal fails to give the benefit of tax

shielding to the stand-alone railroad in years 10-20, <u>see</u> Joint Technical Corrections Petition, NS WP "D42125 Exhibit III-H-1 STB No3 (NS Exhibit 2 Terminal Value).xlsm," this error will be corrected in the manner proposed by DuPont. In addition, the terminal value calculation portion of the <u>Merits Decision</u> did not fully describe our intent to accept DuPont's adjustment but reject its interest rate calculation. Attached as Appendix A is a revised Appendix D (Discounted Cash Flow Analysis), Section F (Terminal Adjustment Value) of the <u>Merits Decision</u>, which includes corrected language to reflect this intent.

- 30. <u>Fuel Expense Indexing</u>. The parties agree that while the text of the <u>Merits Decision</u> stated that the Board would use EIA forecasts of WTI fuel costs to calculate the fuel portion of operating expenses, the associated workpapers did not make a corresponding adjustment to the operating expense index. The parties disagree on the appropriate method for correcting this error. DuPont argues that the Board should apply the EIA WTI fuel price forecast across the 2011-2019 DCF operating expense forecast period, while NS argues that the Board should use actual fuel expense data where available (i.e., 2011 and 2012) and apply the EIA WTI fuel price forecast only to subsequent years (i.e., 2013-2019) in the DCF operating expense forecast period. Because the Board generally finds that actual data, when available, is superior to forecasts or projections, see <u>Duke Energy Corp. v. Norfolk S. Ry.</u>, 7 S.T.B. 89, 143 (2003), this error will be corrected in the manner proposed by NS.
- 31. Phased PTC Investment. The parties agree that the DCF model did not properly account for costs related to positive train control (PTC) system upgrades over the 2010-2015 time period. The parties disagree about what costs should be phased in and how to effectuate the phased investment. As to the first issue, NS argues that costs for PTC development, testing, spectrum, back office functionality, design, and locomotive radios would need to be incurred a second time to make the 2009-installed PTC system compliant with 2015 requirements, while DuPont argues that only the \$90.3 million for PTC development that was inadvertently included in the base year calculation should be spread over the 2010-2015 period. In the underlying Merits Decision, at 229-30 & n.1192, the Board accepted DuPont's position that only PTC development costs would be required to upgrade the system to meet RISA requirements, and so this part of the error will be corrected in the manner proposed by DuPont. As to the second issue, in order to reflect bonus depreciation, DuPont would create separate DCF models for each year of the phase-in period and then combine the results, while NS would phase in the costs as part of the overall DCF model without recognition of any bonus depreciation. The Merits Decision notes, at page 285, that bonus depreciation will apply "to the extent the costs are incurred during the appropriate time period and the bonus depreciation is otherwise applicable." This language was not intended, however, to imply that DuPont would be entitled to bonus depreciation during the development period for something that would not be placed in service during the 2010-2015 time period. As a result, this part of the error will be corrected in the manner proposed by NS. Should the parties believe this issue warrants further discussion, they may raise it in a petition for reconsideration.

RESULTS OF CORRECTED ANALYSIS

The tables below contain corrected calculations resulting from our resolution of the various technical matters raised by the parties. These tables will replace the corresponding tables in the Merits Decision.

TABLE A-1

DRR 2009 Operating Costs* (\$ millions)					
DuPont NS STB					
Train & Engine Personnel	\$338.8	\$586.0	\$544.1		
Locomotive Requirements	80.6	145.3	119.4		
Locomotive Maintenance	156.4	151.1	151.1		
Locomotive Operations	435.8	458.2	422.5		
Railcar Lease & Maintenance	356.2	420.1	416.8		
Materials & Supply—Operating	4.5	11.1	11.0		
Ad Valorem Tax	56.9	84.2	84.2		
Operating Managers	63.6	128.5	128.5		
General & Administrative	77.4	172.1	171.6		
Loss & Damage	12.8	12.8	12.8		
Maintenance-Of-Way	156.9	377.1	350.1		
Trackage Rights	58.9	74.0	74.0		
Intermodal Lift and Ramp	108.0	110.4	110.4		
Insurance	39.9	69.6	66.4		
Startup and Training	121.6	207.9	207.6		
Motor Vehicles	6.9	6.9	6.9		
TOTAL	\$2,075.1	\$3,015.6	\$2,877.6		

^{*} Columns do not add up due to rounding.

TABLE A-2

Total DRR Locomotive Requirements ¹²						
Locomotive Type	Locomotive Type DuPont Opening NS Reply DuPont Rebuttal STB					
Road/Helper Service–ES44-AC	481	977	639	921 ¹³		
Local Service–GP38	101	291	180	283		
Switch Service–SW1500	80	_	94	_		
Switch Service–SD40-2	_	173	_	173		
TOTAL	662	1,441	913	1,377		

¹² The number of locomotives in this table has been reduced to reflect DuPont's peaking factor of 5.4%.

¹³ In its brief, NS acknowledges that it had not properly reflected its warm-up, cooldown period for locomotives. To correct for this error, it reduced the number of ES44 locomotives it proposed for the DRR by 4%. NS Brief at 57-58. The Board accepts this correction from 977 to 938 ES44-AC locomotives and incorporates it into the DRR's Locomotive Requirements.

TABLE A-4

MOW Costs				
	DuPont	NS	STB	
Staffing	\$108,831,351	\$264,738,135	252,228,398	
Equipment	\$21,592,073	\$55,869,494	\$38,702,372	
Contracted Maintenance Expense				
Geometry Testing	\$1,999,014	\$5,080,447	\$5,080,447	
Rail Flaw Detection Testing	\$2,402,989	\$2,402,989	\$2,402,989	
Rail Grinding	\$0*	\$7,993,078	\$7,993,078	
Yard Cleaning	\$959,400	\$1,893,091	\$1,893,091	
Vegetation Control	\$4,288,448	\$9,969,433	\$9,969,433	
Major Bridge Inspection	\$187,076	\$935,379	\$935,379	
Ballast Cleaning	\$0	\$1,866,775	\$1,866,775	
Re-Paving Crossings	\$2,060,240	\$2,060,240	\$2,060,240	
Snow Removal	\$325,000	\$750,000	\$750,000	
Storm Debris Removal	\$100,000	\$250,000	\$100,000	
Washouts	\$100,000	\$500,000	\$500,000	
Environmental Cleanup	\$100,000	\$100,000	\$100,000	
Annual Average Clearing for Wrecks	\$3,316,806	\$6,169,106	\$6,169,106	
Annual Average Derailment	\$3,331,295	\$11,339,799	\$11,339,799	
Annual Bridge Maintenance	\$380,000	\$380,000	\$380,000	
Annual Building Maintenance	\$2,010,849	\$719,782	\$2,720,541	
Communications System Maintenance	\$4,874,524	\$4,124,965	\$4,874,524	
TOTAL	\$156,859,065	\$377,142,713	\$350,066,172	

^{*} Capitalized by DuPont, \$5,568,260.

TABLE B-1

DRR Construction Costs				
	DuPont	NS	STB	
Land	\$4,099,533,161	\$5,323,836,000	\$5,188,144,371	
Roadbed Preparation	\$4,336,345,856	\$9,173,241,189	\$6,089,782,845	
Track	\$8,208,180,061	\$10,628,413,215	\$9,739,622,711	
Tunnels	\$1,081,190,307	\$1,085,992,262	\$1,081,190,307	
Bridges	\$2,285,092,433	\$4,348,113,677	\$3,677,520,158	
Signals and Communications	\$1,489,241,789	\$2,154,911,924	\$2,049,755,911	
Buildings and Facilities	\$1,043,764,479	\$2,636,247,091	\$1,617,063,936	
Public Improvements	\$165,472,162	\$243,336,967	\$165,420,637	
Mobilization	\$502,450,751	\$916,793,225	\$659,349,626	
Engineering	\$1,860,928,709	\$2,980,863,797	\$2,442,035,651	
Contingencies	\$2,097,266,655	\$3,370,629,499	\$2,752,174,178	
TOTAL	\$27,169,466,364	\$42,862,378,846	\$35,462,060,332	

TABLE B-8

	DuPont	NS	STB
Clearing & Grubbing	\$84,231,998	\$127,954,212	\$127,701,421
Earthwork	\$3,247,473,950	\$5,794,354,032	\$4,722,681,552
Finish Grading	\$0	\$68,592,142	\$68,592,142
Land for waste quantities	\$320,124,853	\$611,364,762	\$147,067,735
Lateral Drainage	\$50,086,319	\$50,086,319	\$50,086,319
Yard Drainage	\$0	\$135,385,380	\$93,277,503
Retaining Walls	\$377,273,513	\$938,032,394	\$517,206,161
Rip Rap	\$36,943,483	\$36,989,466	\$36,947,918
Relocation of Utilities	\$147,136	\$147,136	\$147,136
Topsoil Placement / Seeding	\$1,439,739	\$866,863	\$866,863
Subgrade Preparation	\$0	\$76,476,462	\$76,476,462
Road Surfacing	\$523,750	\$524,265	\$523,750
Lighting	\$0	\$267,146,016	\$0
Environmental Compliance	\$177,345	\$177,345	\$177,345
Dust Control	\$0	\$7,250,116	\$0
Winter Costs	\$0	\$311,080,798	\$0
Culvert Cost	\$217,923,770	\$746,813,482	\$248,030,538
TOTAL	\$4,336,345,856	\$9,173,241,189	\$6,089,782,845

TABLE B-10

Track Construction				
	DuPont	NS	STB	
Sub-ballast & Ballast	\$1,125,237,557	\$2,354,887,144	\$2,066,764,868	
Ties	\$1,621,007,097	\$1,820,757,718	\$1,809,344,005	
Rail	\$2,519,913,701	\$3,228,501,513	\$2,673,593,103	
Other Track Materials	\$797,129,391	\$882,650,414	\$877,335,828	
Turnouts	\$526,710,980	\$575,226,561	\$575,226,561	
Switch Heaters	\$54,131,000	\$50,901,000	\$50,901,000	
Derails & Wheel Stops	\$13,425,265	\$34,544,713	\$34,544,713	
Lubricators	\$12,067,596	\$12,067,596	\$12,067,596	
Field Welds	\$31,623,631	\$33,964,324	\$33,755,087	
Diamond Crossings	\$30,829,950	\$30,221,170	\$30,287,332	
Weather-Related Labor Additions	\$0	\$19,120,569	\$0	
Track Installation/Labor	\$1,476,103,893	\$1,585,570,494	\$1,575,802,617	
TOTAL	\$8,208,180,061	\$10,628,413,215	\$9,739,622,711	

TABLE B-14

Bridges				
	DuPont	NS	STB	
Railroad Bridges	\$2,273,067,514	\$4,082,575,690	\$3,627,493,855	
Partially Owned Lines	\$0	\$187,437,013	\$37,336,383	
Highway Overpasses	\$12,024,919	\$12,689,920	\$12,689,920	
Weather Related Additions	\$0	\$65,411,053	\$0	
TOTAL	\$2,285,092,433	\$4,348,113,677	\$3,677,520,158	

TABLE B-17

Signals & Communications					
	DuPont NS STB				
Signals	\$1,036,280,765	\$1,558,751,965	\$1,528,174,916		
Communications	\$243,726,222	\$254,813,841	\$243,726,222		
PTC	\$94,017,984	\$94,017,984	\$94,017,984		
Locomotive PTC Costs	\$46,477,431	\$93,527,469	\$93,527,469		
PTC Development Costs	\$68,739,387	\$153,800,665	\$90,309,321		
TOTAL	\$1,489,241,789	\$2,154,911,924	\$2,049,755,911		

TABLE B-18

Buildings & Facilities				
	DuPont	NS	STB	
Headquarters Building	\$11,212,906	\$33,122,085	\$33,122,085	
Fueling Facilities	\$91,620,788	\$202,067,953	\$202,067,953	
Locomotive Shops	\$186,302,766	\$279,454,149	\$310,504,610	
Car Repair Shop	\$0	\$37,831,620	\$0	
Crew Facilities	\$18,306,554	\$31,685,640	\$31,685,640	
MoW & Signal Maintainer Facilities	\$13,565,391	\$76,670,455	\$39,938,735	
Major Yards	\$209,612,345	\$12,260,382	\$12,260,382	
Minor Yards	\$79,653,833	\$13,506,673	\$13,506,673	
Non-automotive Observation Towers	\$0	\$10,783,649	\$10,783,649	
Auto Yards	\$125,832,676	\$127,934,070	\$136,091,820	
Intermodal Yards	\$303,768,908	\$792,762,789	\$457,319,716	
Bulk Transfer Yards	\$3,888,312	\$33,922,000	\$7,083,442	
Mechanical Offices	\$0	\$4,520,435	\$0	
Warehouses (and other miscellaneous buildings and site costs)	\$0	\$979,725,191	\$362,699,231	
TOTAL	\$1,043,764,479	\$2,636,247,091	\$1,617,063,936	

TABLE C-2

	Revenue Forecasts				
	(\$ mi)	lions)			
Year	DuPont	NS	STB		
2009	\$3,109.7	\$2,851.7	\$2,930.1		
2010	6,152.8	5,611.2	5,768.4		
2011	6,718.2	6,074.8	6,252.0		
2012	7,238.1	6,561.6	6,739.2		
2013	7,721.8	7,024.4	7,201.8		
2014	8,349.7	7,444.6	7,721.4		
2015	8,916.5	7,825.8	8,192.9		
2016	9,713.2	8,353.0	8,897.1		
2017	10,642.3	8,930.9	9,765.7		
2018	11,660.5	9,547.4	10,657.8		
2019	5,320.1	4,254.4	4,858.5		

TABLE D-1

	DRR Capital Recovery (\$ millions)				
Year	Capital Requirement Road Property	Total Taxes	Required Cash Flow	Present Value	
2009	\$2,014.2	\$0	\$2,014.2	\$1,921.1	
2010	3,626.4	0	3,626.4	3,167.7	
2011	3,733.8	0	3,733.8	2,915.0	
2012	3,892.5	0	3,892.5	2,725.3	
2013	4,002.9	0	4,002.9	2,514.1	
2014	4,158.6	0	4,158.6	2,343.0	
2015	4,332.5	823.6	3,508.9	1,780.3	
2016	4,490.9	1,403.7	3,087.2	1,400.0	
2017	4,655.2	1,560.4	3,094.8	1,259.0	
2018	4,830.2	1,639.3	3,190.9	1,164.5	
2019	2,072.8	709.6	1,363.1	462.2	
Terminal Value ***			17,155.7		
TOTAL				\$38,807.9	

TABLE D-2

DRR Total Revenue Requirements						
	(\$ millions)					
Year	RPI Capital Recovery	Operating Expenses	DRR Revenue Requirements			
1 Cui	Ki i Capitai Recovery	Operating Expenses	Requirements			
2009	\$2,014.2	\$1,874.6	\$3,888.7			
2010	3,626.4	3,556.3	7,182.7			
2010	3,020.4	3,330.3	7,102.7			
2011	3,733.8	4,013.4	7,747.2			
2012	3,892.5	4,125.4	8,017.9			
2012	3,072.3	7,123.7	0,017.7			
2013	4,002.9	4,406.5	8,409.4			
2014	4,158.6	4,613.3	8,771.9			
2014	7,130.0	4,013.3	0,771.7			
2015	4,332.5	4,809.7	9,142.2			
2016	4,490.9	5,122.7	9,613.7			
	,	- ,	- ,			
2017	4,655.2	5,462.3	10,117.5			
2018	4,830.2	5,816.1	10,646.3			
2019	2,072.8	2,565.7	4,638.4			

TABLE D-3

Discounted Cash Flow Analysis					
(\$ millions)					
	DRR Revenue	NS Forecast		Present	Cumulative
Year	Requirements	Revenues	Difference	Value	Difference
2009	\$3,888.7	\$2,930.1	\$(958.6)	\$(935.1)	\$(935.1)
2010	7,182.7	5,768.4	(1,414.3)	(1,234.1)	(2,169.2)
2011	7,747.2	6,252.0	(1,495.2)	(1,159.3)	(3,328.5)
2012	8,017.9	6,739.2	(1,278.7)	(898.5)	(4,227.0)
2013	8,409.4	7,201.8	(1,207.6)	(761.2)	(4,988.2)
2014	8,771.9	7,721.4	(1,050.5)	(594.0)	(5,582.3)
		-	, , ,		
2015	9,142.2	8,192.9	(949.3)	(481.6)	(6,063.9)
	,	,	,		
2016	9,613.7	8,897.1	(716.6)	(326.1)	(6,390.0)
	,	,	,	, ,	() /
2017	10,117.5	9,765.7	(351.8)	(143.6)	(6,533.6)
	-,	- 7	(,	(/	(-,/
2018	10,646.3	10,657.8	11.5	4.2	(6,529.4)
	-,	-,			(-)/
2019	4,638.4	4,858.5	220.0	76.3	(6,453.1)

MARKET DOMINANCE

An important part of the <u>Merits Decision</u> focused on determining the specific movements over which NS has market dominance. Much of that analysis was provided in a highly confidential "market dominance appendix." Because that appendix contained competitively sensitive information, it was initially provided only to the parties' outside counsel. Since then, the parties have proposed redactions of confidential or highly confidential material contained in the market dominance appendix so that a public version of the appendix could be released. As a result, the <u>Merits Decision</u> is being updated to (1) clarify that this process has been completed and (2) include a public version of the market dominance appendix.

SUMMARY

Pursuant to this decision, the <u>Merits Decision</u> is being updated to (1) include a public version of the market dominance appendix; (2) reflect the technical corrections the Board has adopted in response to suggestions made by the parties; (3) include a revised Appendix D (Discounted Cash Flow Analysis), Section F (Terminal Adjustment Value) of the <u>Merits Decision</u>; and (4) make several minor grammatical and formatting changes elsewhere in the decision—e.g., changing "Appendix" to "appendix" in three places and moving a parenthetical identifying a short cite to earlier in the decision.

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

It is ordered:

- 1. The technical corrections discussed in this decision are hereby adopted.
- 2. The <u>Merits Decision</u> is being updated to include the public version of the highly confidential market dominance appendix, and otherwise modified as set forth above.
- 3. Petitions for reconsideration of this decision and the <u>Merits Decision</u> must be filed by October 23, 2014.
 - 4. This decision is effective on the date of service.

By the Board, Chairman Elliott, Vice Chairman Miller, and Commissioner Begeman.

APPENDIX A

<u>Merits Decision</u> Replacement Section F (Terminal Value Adjustment) of Appendix D (Discounted Cash Flow Analysis)

DuPont proposes an adjustment to the terminal value in the Board's DCF model. DuPont states that the Board's DCF model assumes that the SARR's capital structure remains constant in perpetuity, so there will always be debt, with associated interest payments, as well as equity. But for tax purposes, according to DuPont, the Board's DCF model assumes that the SARR is 100% equity financed during the period after year 20 and before the first assets are replaced in the replacement level of the model. Therefore, DuPont argues, during this period, the cost of capital assumes that the SARR makes interest payments, but the model does not allow the SARR to receive the tax shielding effect of those interest payments. DuPont proposes to correct this mismatch by assuming that interest payments continue in perpetuity for tax shield purposes as well. To do this, DuPont adjusts the terminal value in the capital carrying charges to reflect the cost of capital assumption that the SARR's level of debt is held constant into perpetuity, and that interest tax shields consistent with this level of debt are accounted for in the cash flow calculation.

NS disagrees, arguing that this assumption contradicts DuPont's position and Board precedent that the term of the SARR's debt is 20 years. NS also argues that DuPont's extension of the DRR's interest payments into perpetuity conflicts with the interest rates included in the DRR's cost of debt, because the cost of debt is based on a collection of short and long term debt instruments. NS asserts that, if the Board is inclined to eliminate the mismatch identified by DuPont, the correct method would be to revert back to <u>Coal Trading</u> and recalculate the DRR capital structure as the debt is amortized. NS includes a version of the DCF model implementing this change. 1533

On rebuttal, DuPont argues that, contrary to NS's position, the ICC and the Board did not even recognize this mismatch, let alone approve it, in <u>Coal Trading</u>, <u>McCarty Farms 1997</u>, or

DuPont Opening III-H-7 to III-H-10.

¹⁵²⁵ DuPont Opening III-H-8.

¹⁵²⁶ DuPont Opening III-H-8 to III-H-9.

¹⁵²⁷ DuPont Opening III-H-9.

¹⁵²⁸ DuPont Opening III-H-9.

¹⁵²⁹ DuPont Opening III-H-9.

¹⁵³⁰ NS Reply III-H-9.

¹⁵³¹ NS Reply III-H-9 to III-H-10.

¹⁵³² NS Reply III-H-10.

¹⁵³³ NS Reply III-H-10, citing NS Reply WP "Alternative DCF.xlsx."

<u>Major Issues</u>. DuPont argues that NS's proposed fix matches the capital structure adopted in <u>Coal Trading</u>, but the ICC soon discarded this approach in <u>Bituminous Coal</u>, 10 I.C.C. 2d at 319. DuPont also argues that the <u>Coal Trading</u> approach is unrealistic because it contends that the cost of equity would decline as the proportion of equity increases over time, but NS fails to adjust the cost of capital downward. State of the proportion of equity increases over time, but NS fails to adjust the cost of capital downward.

We will accept DuPont's argument regarding the terminal value adjustment to correct the mismatch it has identified, but we will correct DuPont's interest rates to reflect the Board's holding that DuPont must pay down the principal on its capital investments. See supra Section E (Interest Schedule of Assets Purchased With Debt Capital). DuPont is correct that the ICC's decision in Coal Trading did not encounter the mismatch described here, because the capital structure adopted by the ICC shifted to greater proportions of equity over time as the SARR paid off the principal on its debt. Coal Trading, 6 I.C.C. 2d at 379-80. The Board's decisions in McCarty Farms 1997 and Major Issues did not approve or even refer to the mismatch identified by DuPont. McCarty Farms 1997, 2 S.T.B. at 522-23 & n.123; Major Issues, slip op. at 65. Accordingly, DuPont's adjustment is not contrary to Board precedent.

To the extent there is a contradiction between DuPont's adjustment and the assumption that the term of the SARR's debt is 20 years, as NS claims, it is a contradiction that already exists in the Board's DCF model. That is, as DuPont points out, the DCF model assumes that the SARR's capital structure includes a debt component (including the cost of the associated interest payments) in perpetuity, not for 20 years. However, as structured the model does not allow the SARR to receive the tax shielding effect of those interest payments. Thus, DuPont's adjustment fixes one aspect of an apparent contradiction, rather than creating a new one. As for NS's argument that there would be a conflict with the interest rates included in the DRR's cost of debt, it is a feature of the DCF model to assume current numbers into perpetuity. If interest rates significantly change, the lawful rate may change as a result, and any party is free to petition the Board, under 49 C.F.R. § 1115.4, to reopen a proceeding on the grounds of substantially changed circumstances. Finally, NS's proposed alternative solution, reverting to the Coal Trading approach of recalculating the SARR's capital structure over time, would be unnecessarily disruptive to the Board's DCF methodology, unlike the simple adjustment proposed by DuPont.

As discussed in the previous section, DuPont's DCF utilizes coupon, interest-only payments and does not include a home mortgage style payment as the Board requires. Because of the inconsistency between the interest payments in these two scenarios, the Board must adjust the interest value to determine the proper tax benefit. To do so, a straight-line average of the

DuPont Rebuttal III-H-11 to III-H-12 (citing <u>Coal Trading</u>, 6 I.C.C. 2d at 379-80; <u>McCarty Farms 1997</u>, 2 S.T.B. at 522 n.123; <u>Major Issues in Rail Rate Cases (Major Issues)</u>, EP 657 (Sub-No. 1), slip op. at 65 (STB served Oct. 30, 2006), <u>aff'd sub nom. BNSF Ry. v. STB</u>, 526 F.3d 770 (D.C. Cir. 2008)).

¹⁵³⁵ DuPont Rebuttal III-H-12.

¹⁵³⁶ DuPont Rebuttal III-H-12 to III-H-13.

interest payments over the amortization period, here 20 years, is used as the value for determining the tax benefit received in the terminal value calculation.